

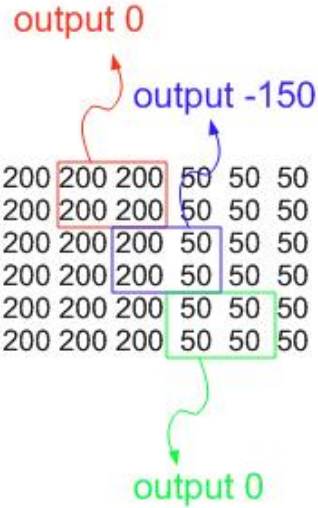
Roberts

$$\begin{bmatrix} -1 & 0 \\ 0 & 1 \end{bmatrix} \quad R1$$

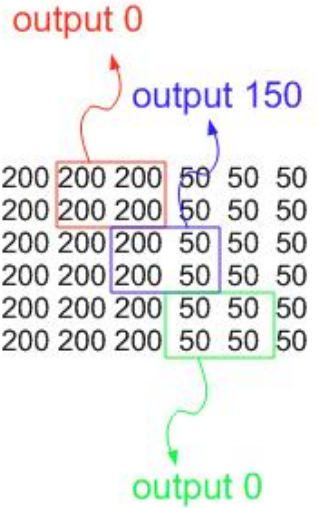
$$\begin{bmatrix} 0 & -1 \\ 1 & 0 \end{bmatrix} \quad R2$$

Vertical edge

Apply R1 filter

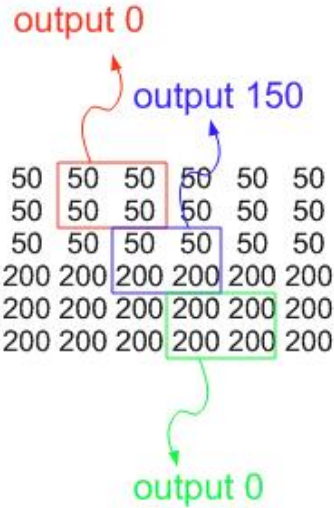


Apply R2 filter

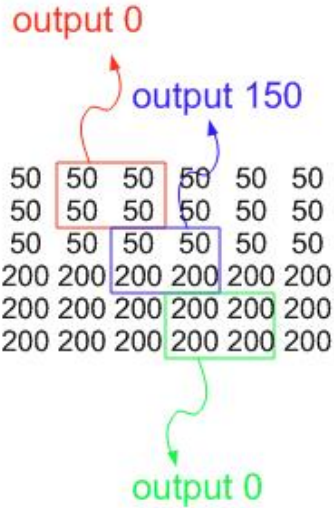


Horizontal edge

Apply R1 filter

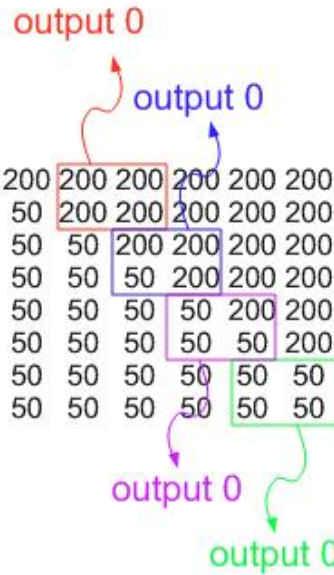


Apply R2 filter

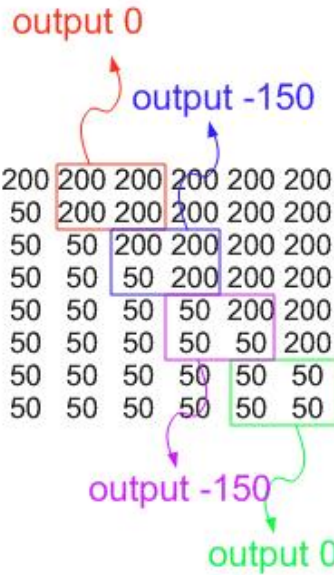


Diagonal edge

Apply R1 filter



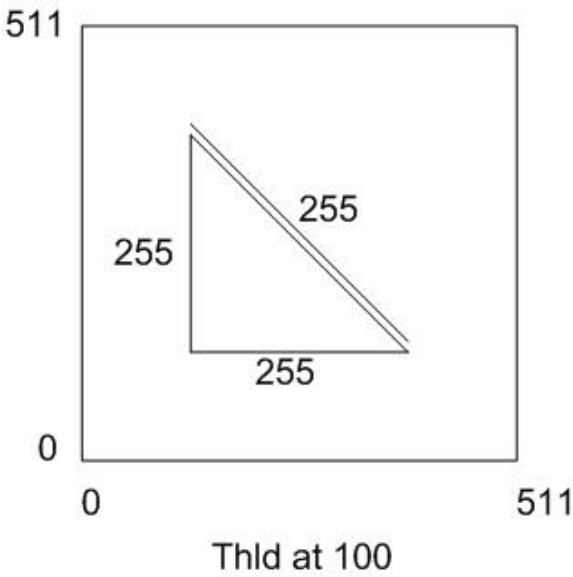
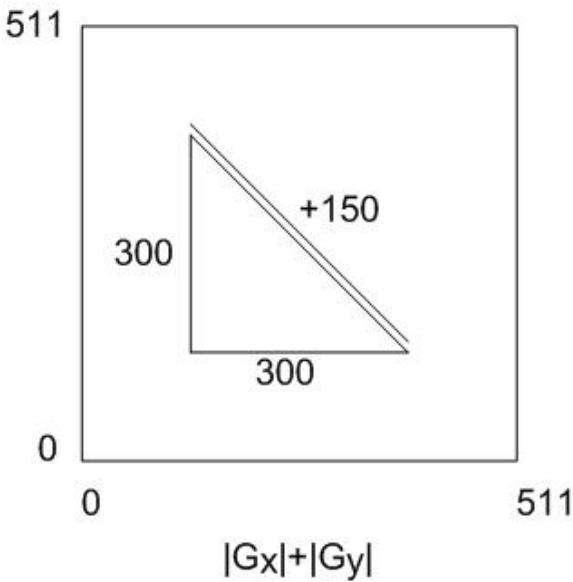
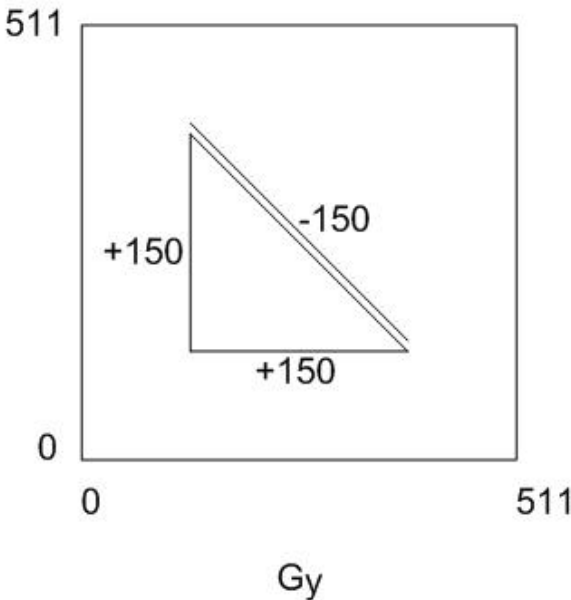
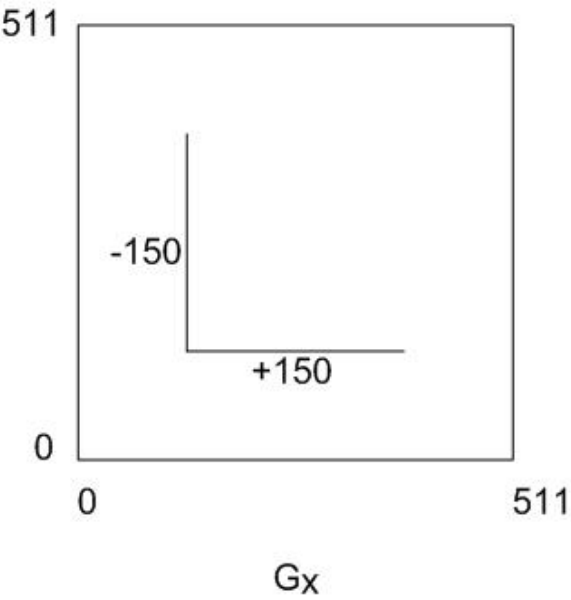
Apply R2 filter

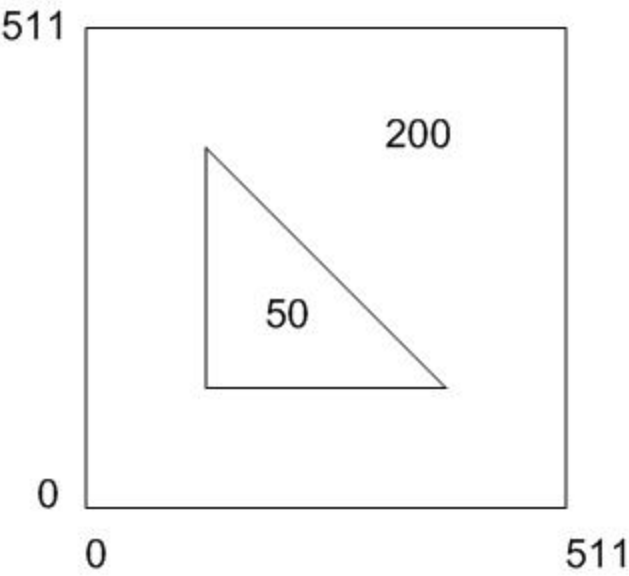


Roberts

-1	0
0	1

0	-1
1	0





Prewitt

-1	-1	-1
0	0	0
1	1	1

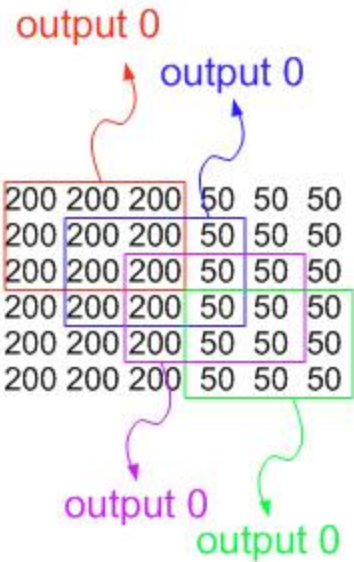
P1

-1	0	1
-1	0	1
-1	0	1

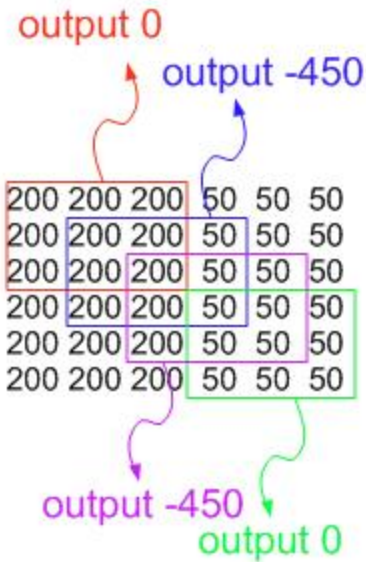
P2

Vertical edge

Apply P1 filter

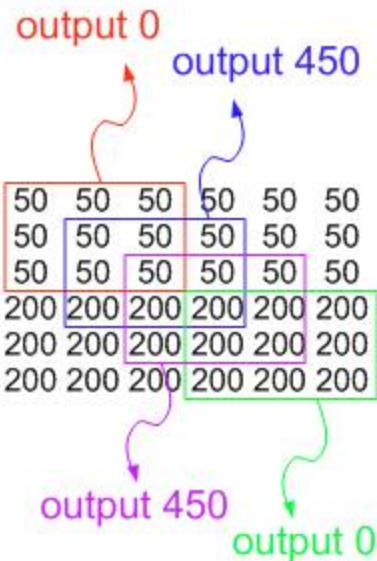


Apply P2 filter

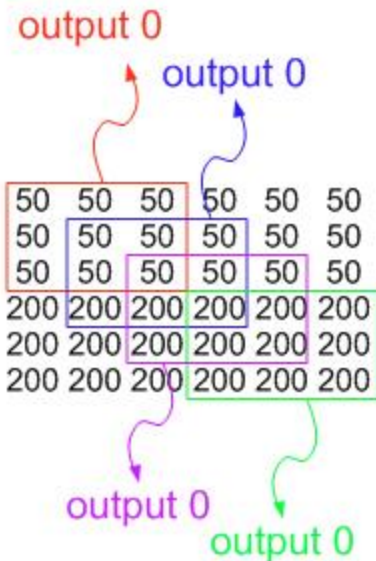


Horizontal edge

Apply P1 filter

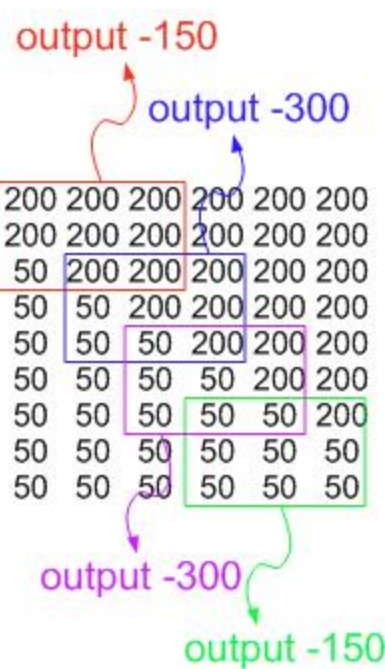


Apply P2 filter

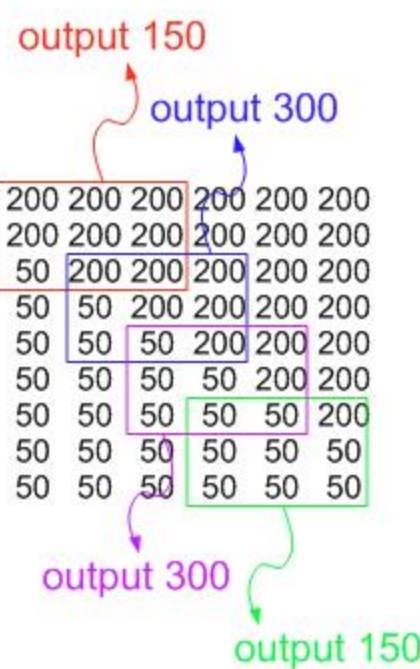


Diagonal edge

Apply P1 filter



Apply P2 filter



Prewitt

-1	-1	-1
0	0	0
1	1	1

-1	0	1
-1	0	1
-1	0	1

